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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

FOX, BRYAN J

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/836,792	Applicant(s) MUHONEN, AHTI	
	Examiner Bryan J Fox	Art Unit 2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 9 is objected to because of the following informalities: Claim 9 is dependent upon itself. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over van den Heuvel, et al. (GB2294844A) in view of Bridges et al. (US006546246B1) and further in view of Suzuki (US006493540B1).

Regarding **claim 1**, Van den Heuvel, et al. discloses a communications operating system where a subscriber unit 20 for use in a communications system 19 may be used in multiple different available systems (see figure 1 and page 3, lines 31-34), which reads on the claimed "mobile station, configured for use as a software radio having the capability for universal adaptive use within globally dispersed cellular communication networks". Once the unit has accessed the channel of the common communication system, it receives an indication of available communication systems (see page 4, lines 14-18), which reads on the claimed "transceiver for receiving data over a common

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system parameter channel” and this information may provide details such as features available (see page 4, lines 18-20), which reads on the claimed “processor for compiling and storing network characteristic data relating to said globally dispersed cellular communication networks, received over said common system parameter channel, relating to the operational capabilities of said cellular networks”. Furthermore, the system uses a matrix having features cross-referenced by subscriber unit capabilities, which reads on the claimed “combining said network characteristic data and said subscriber identification data into an addressable matrix of operational capabilities”. The system disclosed by van den Heuvel, et al. fails to teach that the subscriber unit will store identification information.

In a similar field of endeavor, Bridges et al discloses a system with over the air programming where a mobile station 68 is provided with a memory device 67 for storing a Preferred System Identification List and/or Intelligent Roaming Database that indicates the band or bands where a mobile station may find a preferred system when roaming, including the system ID or system operator code corresponding to the wireless carrier the mobile station should use for wireless communication in order to obtain the services required by the subscriber (see column 9, lines 61-66), which reads on the claimed “processor for compiling and storing subscriber identification data relating to the operational capabilities of said mobile station”.

It would have been obvious to one skilled in the art at the time of the invention to modify van den Heuvel, et al. with Bridges, et al. to include the above memory that stores information relating to the identification and operational of the station in order to

allow the mobile station to obtain service on the cellular network with which the home cellular service provider has the best roaming agreement, and/or which supports the services the user requires as suggested by Bridges, et al. (see Bridges, et al. column 4, lines 39-51). The combination of van den Heuvel et al and Bridges et al fails to expressly disclose multiple processors.

In a similar field of endeavor, Suzuki discloses a mobile phone with a transmission control circuit 61, a signal coding unit 62, a signal decoding unit 63, a destination judging unit 64, and a CPU 65 (see figure 1), each of which are processors for carrying out different functions.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of van den Heuvel et al and Bridges et al with Suzuki to include the multiple processors in order to increase speed by allowing parallel processing of data.

The only difference between the above combination and the claimed invention is that the compiling the system information and the matrix is done at the system in the above combination but in the claimed invention it is done in the mobile unit. However, that difference in the location of the compilation would not render the invention patentable over the above references because it would merely depend on where one would like to have the above compiling operation executed. Therefore, it would have been obvious to one skilled in the art at the time of the invention modify the combination of van den Heuvel, et al, Bridges, et al. and Suzuki to include compilation of the information on the unit in order to save processing time on the system.

Regarding **claim 2**, the combination of van den Heuvel, et al and Bridges, et al. fails to disclose that the first, second and third processors are modules within the main microprocessor controller.

In a similar field of endeavor, Suzuki discloses a system with a controller 6, which reads on the claimed "main microprocessor controller" that includes a transmission control unit 61, a signal coding unit 62, a signal decoding unit 63 a destination judging unit 64 and a CPU 65, (see column 4, lines 45-48), which are processors contained within the controller.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of van den Heuvel et al and Bridges et al with Suzuki to include the above processors within the controller in order to conserve space.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over van den Heuvel, et al. in view of Bridges, et al. and Suzuki and further in view of Henry, Jr, et al. (US005603084A).

Regarding **claim 3**, the combination of van den Heuvel, et al, Bridges, et al. and Suzuki fails to teach that a portion of the characteristics are programmed at the time of manufacture.

In a similar field of endeavor, Henry, Jr, et al. teaches that the programming of the serial number and the initial identification number can be accomplished when the phone is manufactured (see column 4, lines 4-7), which reads on the claimed invention

that a portion of said operational characteristics of said mobile station are programmed into the device at the time of manufacture.

It would have been obvious to one skilled in the art at the time of the invention to modify the combination of van den Heuvel, et al, Bridges, et al. and Suzuki with Henry, Jr, et al. to program the serial number during manufacturing in order to eliminate the need to use time to do that later.

Regarding **claim 4**, the combination of van den Heuvel, et al, Bridges, et al. and Suzuki fails to teach that a portion of the characteristics are programmed when the device is activated.

In a similar field of endeavor, Henry, Jr, et al. teaches that some information is programmed after purchase and before a user can place a call (see column 6, lines 20-41), which reads on the claimed invention that a portion of said operational capabilities of said mobile station are programmed into the device at the time of activation with a home cellular service.

It would have been obvious to one skilled in the art at the time of the invention to modify the combination of van den Heuvel, et al, Bridges, et al. and Suzuki with Henry, Jr, et al. to include programming at the time of activation in order to allow information that is dependent on the customer to be input into the phone, such as a credit limit.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of van den Heuvel, et al, Bridges, et al. and Suzuki in view of Henry, Jr, et al., and further in view of Retzer, et al. (US006009325A).

Regarding **claim 5**, the combination of van den Heuvel, et al, Bridges, et al, Suzuki and Henry, Jr, et al. fails to teach the use of a ROM inside of the cellular telephone.

In a similar field of endeavor, Retzer, et al. teaches the use of an EEPROM 207 (electrically erasable programmable read-only memory) in a wireless device (see column 2, lines 60-66 and figure 2), which reads on the claimed "read only memory for storing said operational characteristics of the mobile station".

It would have been obvious to one skilled in the art at the time of the invention to modify the combination of van den Heuvel, et al, Bridges, et al, Suzuki and Henry, Jr, et al. with Retzer, et al. to include the above EEPROM in order to have a re-programmable memory that is quickly accessed.

Regarding **claim 6**, the combination of van den Heuvel, et al, Bridges, et al, Suzuki and Henry, Jr, et al. fails to teach the use of a ROM inside of the cellular telephone.

In a similar field of endeavor, Retzer, et al. teaches the use of an EEPROM 207 (electrically erasable programmable read-only memory) in a wireless device (see column 2, lines 60-66 and figure 2), which reads on the claimed "programmable read only memory for storing said operational characteristics of the mobile station".

It would have been obvious to one skilled in the art at the time of the invention to modify the combination of van den Heuvel, et al, Bridges, et al, Suzuki and Henry, Jr, et al. with Retzer, et al. to include the above EEPROM in order to have a re-programmable memory that is quickly accessed.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of van den Heuvel, et al, Bridges, et al, and Suzuki as applied to claim 1 above, and further in view of Retzer, et al.

Regarding **claim 7**, the combination of van den Heuvel, et al, Bridges, et al. and Suzuki fails to teach the use of an erasable, programmable read only memory.

In a similar field of endeavor, Retzer, et al. teaches the use of an EEPROM 207 (electrically erasable programmable read-only memory) in a wireless device (see column 2, lines 60-66 and figure 2), which reads on the claimed "erasable, programmable read only memory".

It would have been obvious to one skilled in the art at the time of the invention to modify the combination of van den Heuvel, et al, Bridges et al, and Suzuki with Retzer, et al. to include the above EEPROM in order to have a re-programmable memory that is quickly accessed.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van den Heuvel, et al. in view of Bridges, et al.

Regarding **claim 8**, Van den Heuvel, et al. discloses a communications operating system where a subscriber unit 20 for use in a communications system 19 may be used in multiple different available systems (see figure 1 and page 3, lines 31-34), which reads on the claimed "mobile station, configured for use as a software radio having the capability for universal adaptive use within globally dispersed cellular communication

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networks". Once the unit has accessed the channel of the common communication system, it receives an indication of available communication systems (see page 4, lines 14-18), which reads on the claimed "receiving data over a common system parameter channel" and this information may provide details such as features available (see page 4, lines 18-20), which reads on the claimed "compiling and storing network characteristic data, received over said common system parameter channel, relating to the operational capabilities of said network". Furthermore, the system uses a matrix having features cross-referenced by subscriber unit capabilities, which reads on the claimed "combining said network characteristic data and said subscriber identification data into an addressable matrix of operational capabilities". The subscriber unit determines which system it desires to utilize based on the list of available systems, types of features available and system costs (see page 3, lines 31-36), which reads on the claimed "generating an operational configuration based on said matrix". The system disclosed by van den Heuvel, et al. fails to teach that the subscriber unit will store identification information.

In a similar field of endeavor, Bridges et al discloses a system with over the air programming where a mobile station 68 is provided with a memory device 67 for storing a Preferred System Identification List and/or Intelligent Roaming Database that indicates the band or bands where a mobile station may find a preferred system when roaming, including the system ID or system operator code corresponding to the wireless carrier the mobile station should use for wireless communication in order to obtain the services required by the subscriber (see column 9, lines 61-66), which reads on the

claimed "processor for compiling and storing subscriber identification data relating to the operational capabilities of said mobile station".

It would have been obvious to one skilled in the art at the time of the invention to modify van den Heuvel, et al. with Bridges, et al. to include the above memory that stores information relating to the identification and operational of the station in order to allow the mobile station to obtain service on the cellular network with which the home cellular service provider has the best roaming agreement, and/or which supports the services the user requires as suggested by Bridges, et al. (see Bridges, et al. column 4, lines 39-51).

The only difference between the above combination and the claimed invention is that the compiling the system information and the matrix is done at the system in the above combination but in the claimed invention it is done in the mobile unit. However, that difference in the location of the compilation would not render the invention patentable over the above references because it would merely depend on where one would like to have the above compiling operation executed. Therefore, it would have been obvious to one skilled in the art at the time of the invention to compile the information on the unit in order to save processing time on the system.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over van den Heuval in view of Bridges and Suzuki as applied to claim 1 above, and further in view of Jonsson et al (US006181936B1).

Regarding claims 9 and 10, the combination of van den Heuval, Bridges and Suzuki fails to expressly disclose the predetermined criteria comprise at least one of cost, speed and volume of data.

In a similar field of endeavor, Jonsson et al disclose a system where a service node recommends the most favorable mobile network with regard to cost (see column 4, lines 25-38).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of van den Heuval, Bridges and Suzuki with Jonsson et al in order to assist in providing the most economical solution to the user.

Response to Arguments

Applicant's arguments filed January 14, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., common communication system not required) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is provided by Bridges, to allow the mobile station to obtain service on the cellular network with which the home cellular service provider has the best roaming agreement, and/or which supports the services the user requires (see Bridges, et al. column 4, lines 39-51).

The applicant argues that claims 1 and 8 are not taught by the applied art, but as discussed above in the rejections of claims 1 and 8, the examiner respectfully disagrees.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bryan Fox
June 3, 2005

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